

1 **APPARATUS METHOD AND SYSTEM FOR**
2 **ALTERNATE CONTROL OF A RAID ARRAY**

3 **ABSTRACT OF THE INVENTION**

4 Secondary or augmented control of a storage array in a cost effective manner is
5 accomplished by connecting a host to the storage array via a storage adapter independent of a
6 RAID controller. The RAID controller provides primary control for services standard to the
7 RAID controller. Augmented or enhanced services as well as backup control are provided by
8 a control module executing on the host, communicating to one or more selected storage
9 devices within the storage array via the storage adapter. In one embodiment, the control
10 module detects faults or failures in the RAID controller, selectably directs storage commands
11 to the RAID controller, emulates a storage controller including a RAID controller, and
12 provides enhanced or augmented services such as conducting diagnostic, firmware update, or
13 disaster recovery operations.

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